UTAH TRANSIT AUTHORITY

UTA

3600 South 700 West
P.O. Box 30810
Salt Lake City, UT 84130

RECEIVED
JAN 28 2008
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF SUPPORT SERVICES

January 28, 2008

Renette Anderson
Utah Department of Environmental Quality
168 North 1950 West
Salt Lake City, Utah 84116

Dear Ms. Anderson:

Enclosed is Utah Transit Authority's Partner Level Clean Utah Program annual report, documenting our progress on our environmental improvement projects for 2007. UTA's first project was to expand the UTA Rideshare Vanpool Program by 7 to 15% in 2007. At the end of 2006 UTA had 405 vans in our rideshare program. By the end of 2007 UTA had 471 vans, increasing our Rideshare Vanpool Program by 16.3%.

For 2008 UTA proposes a project to reduce the NOx emissions from our bus fleet to reduce emissions and improve air quality along the Wasatch front. This new project would replace the project to expand the Rideshare Vanpool Program, which will remain an ongoing program within UTA.

UTA's second project was to implement an energy savings program in 2007. The objective of the energy savings program was to decrease the use of electrical energy in all areas of UTA's business as practical. To date UTA has installed digital energy monitors in buildings at our Meadowbrook and Riverside facilities. In addition, energy efficient lighting has been installed at the North-South TRAX Park and Ride lots. UTA will continue to expand the use of digital monitoring and the further installation of energy efficient lighting as we continue to implement our energy savings program.

If you have any questions or comments, please contact me at (801) 262-5626.

Sincerely,

Jerry Benson, Ph.D.
Chief Operating Officer

CLEAN UTAH PARTNER

Utah Department of Environmental Quality
www.deq.utah.gov/cleanutah
1-800-458-0145

Annual Report

For year ending: December 31, 2007

Utah Transit Authority

3600 South 700 West	Salt Lake City, UT	84119
Facility Street Address	*City*	*Zip*

Project Status

On a separate sheet, summarize:

- your Clean Utah project commitments and accomplishments made to date,
- major indicators of environmental improvements (measurable ways that you are determining the environment is improving as the result of steps you are taking),
- public participation activities you have undertaken, and
- your project plans for next year, as they relate to this program.

Certification Statement

(to be signed by the senior facility manager)

I certify that the information outlined in the attached annual report is correct and that this facility continues to meet all program criteria and has an active EMS, as defined by the Clean Utah! program. I further certify that this facility has conducted periodic assessments of compliance with legal requirements, has corrected all identified instances of noncompliance, and is currently in compliance with all applicable federal, state, and local environmental rules and regulations.

Signed

1-28-08
Date

Jerry Benson, Ph.D.
Print Name

Chief Operating Officer
Title

UTA

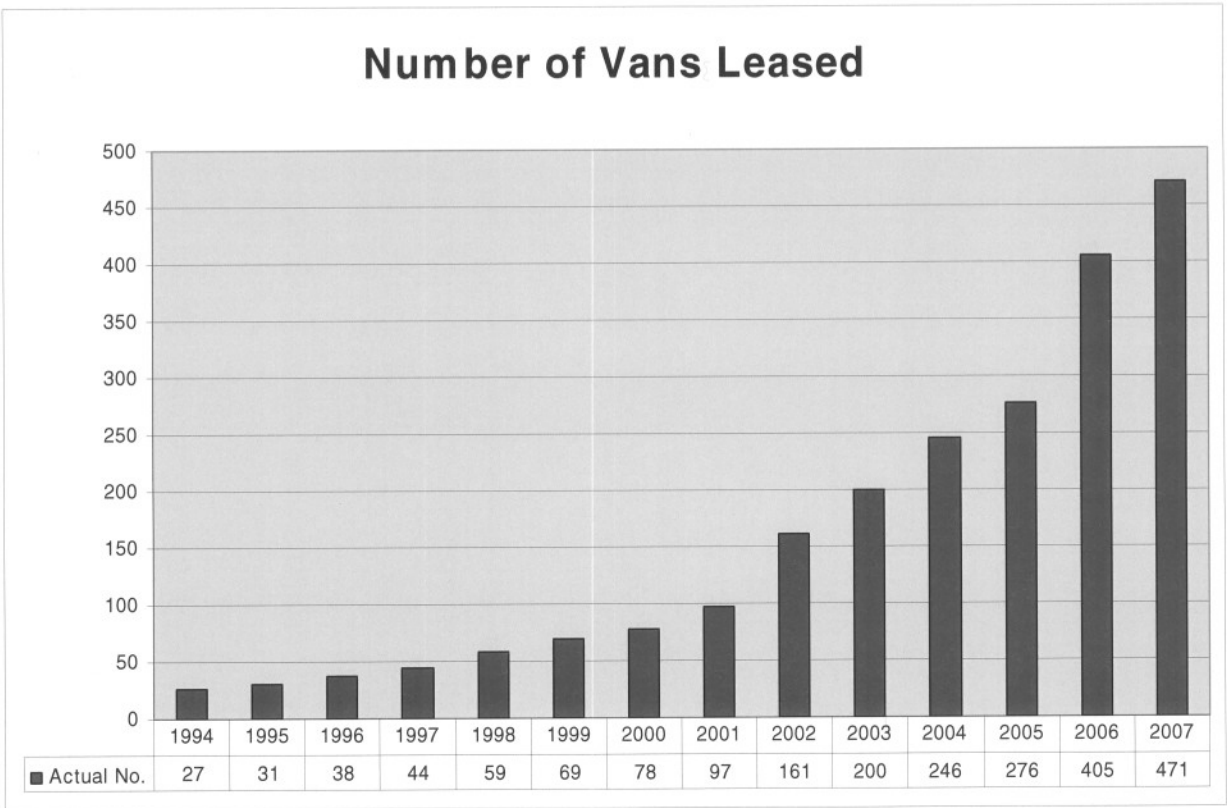
Environmental Improvement Project Results

Project #1: Expand vanpool program by 7 to 15%

Measurements:

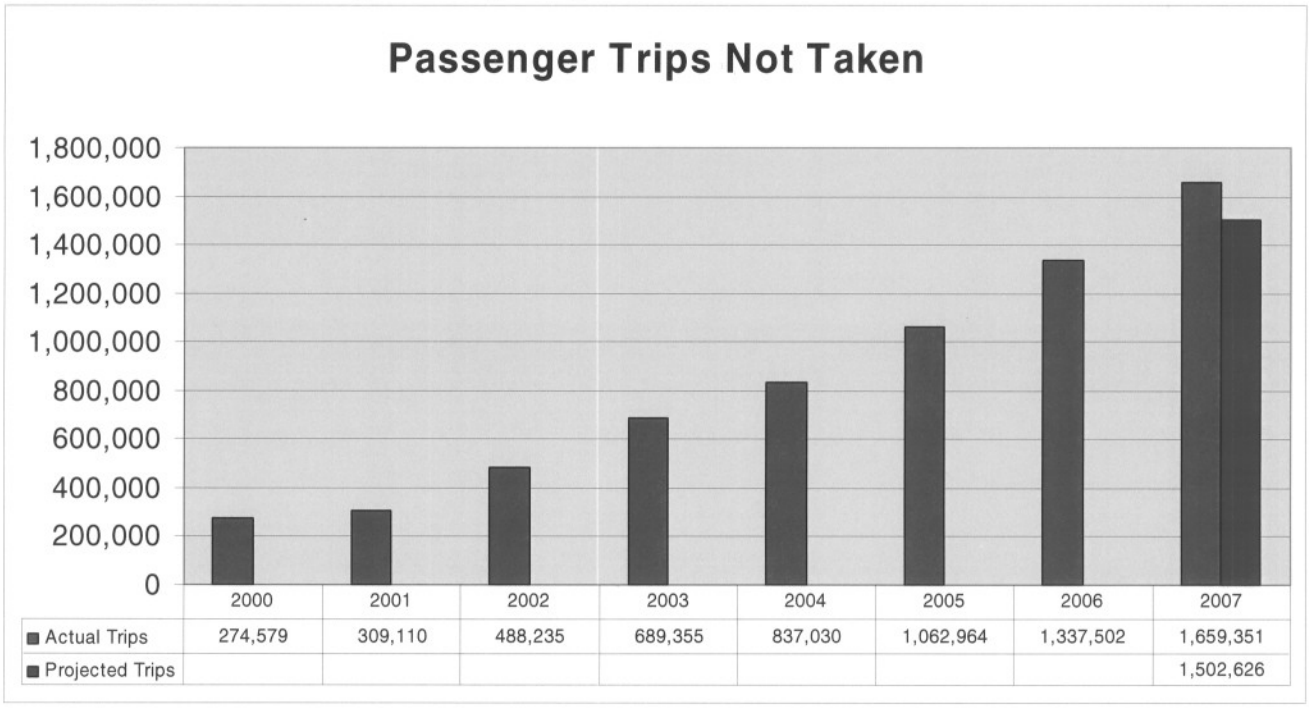
Baseline Measure (2006)	Actual 2007
405	471

UTA achieved a 16.3% increase in the number of vans in our Vanpool Program by the end of 2007.



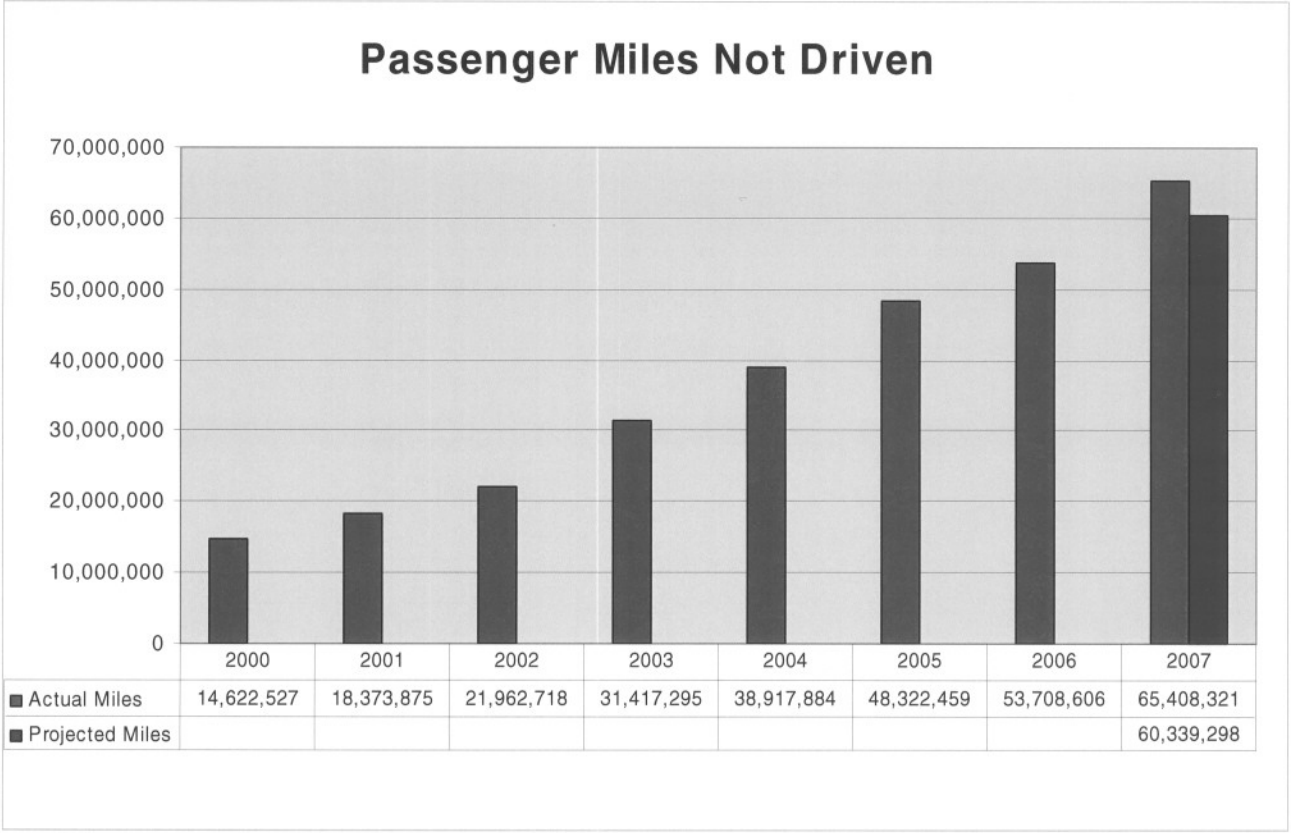
The UTA Vanpool Program averages 9.8 persons per Vanpool. The number of "Single Passenger Vehicles" is reduced by 9 for each new Vanpool. A rise of over 16% of new Vanpools displaced 594 single passenger vehicles by the end of 2007.

UTA set a goal of 1,502,626 "Single Passenger Trips Not Taken" for 2007. UTA surpassed this goal in achieving 1,659,351 "Single Passenger Trips Not Taken" in 2007.



	2000	2001	2002	2003	2004	2005	2006	2007
Actual Trips	274,579	309,110	488,235	689,355	837,030	1,062,964	1,337,502	1,659,351
Projected Trips								1,502,626

UTA set a goal of 60,339,298 "Single Passenger Miles Not Taken" for 2007. UTA surpassed this goal in achieving 65,408,321 "Single Passenger Miles Not Taken" for 2007.



	2000	2001	2002	2003	2004	2005	2006	2007
Actual Miles	14,622,527	18,373,875	21,962,718	31,417,295	38,917,884	48,322,459	53,708,606	65,408,321
Projected Miles								60,339,298

Benefit to the environment for year:

Based on EPA's average annual emissions and fuel consumption for passenger cars and the single passenger miles not taken of 65,408,321 in 2007, the following table lists the total annual pollution not emitted and the fuel not consumed.

Component	Emission Rate and Fuel Consumption[1]	Total Annual Pollution not Emitted and Fuel not Consumed
Hydrocarbons	2.80 grams/mile	202 tons
Carbon Monoxide	20.9 grams/mile	1505 tons
Oxides of Nitrogen	1.39 grams/mile	100 tons
Carbon Dioxide	0.916 lbs/mile	29,957 tons
Gasoline	0.0456 gal/mile	2,982,619 gallons

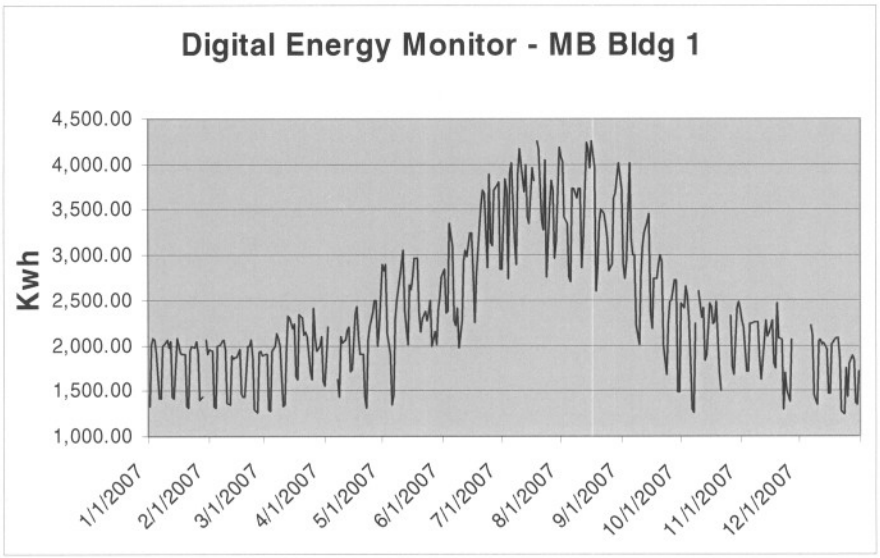
1) "Emission Facts: Average Annual Emissions and Fuel Consumption for Passenger Cars and Light Trucks", United States Environmental Protection Agency, Air and Radiation, EPA420-F-00-013, April 2000.

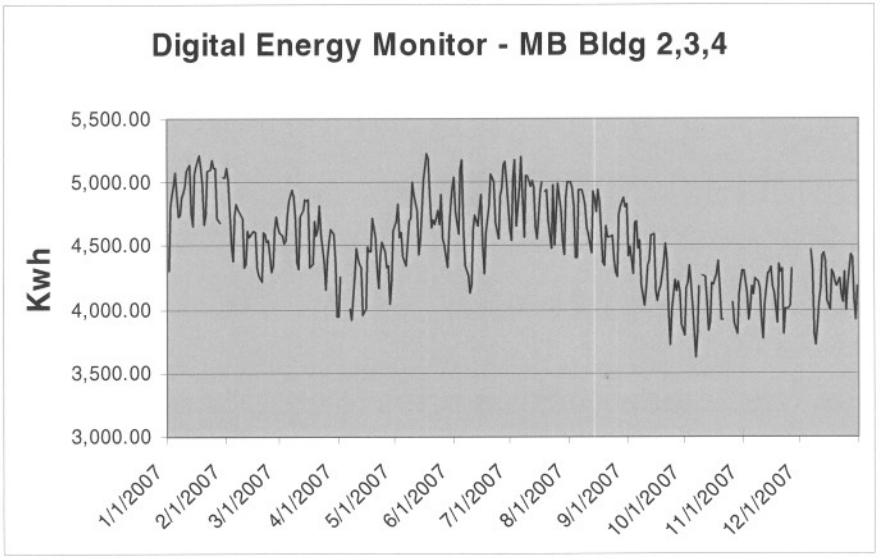
Benefit or savings for company:

The UTA Vanpool Program contributes to the overall transit rider ship. The Vanpool program reduces UTA's investment per rider because of its low operating cost.

Project #2: Implement Energy Savings Program

1) Install digital energy monitors in each building;




Digital Energy Monitor - MB Bldg 2,3,4
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1/1/2007
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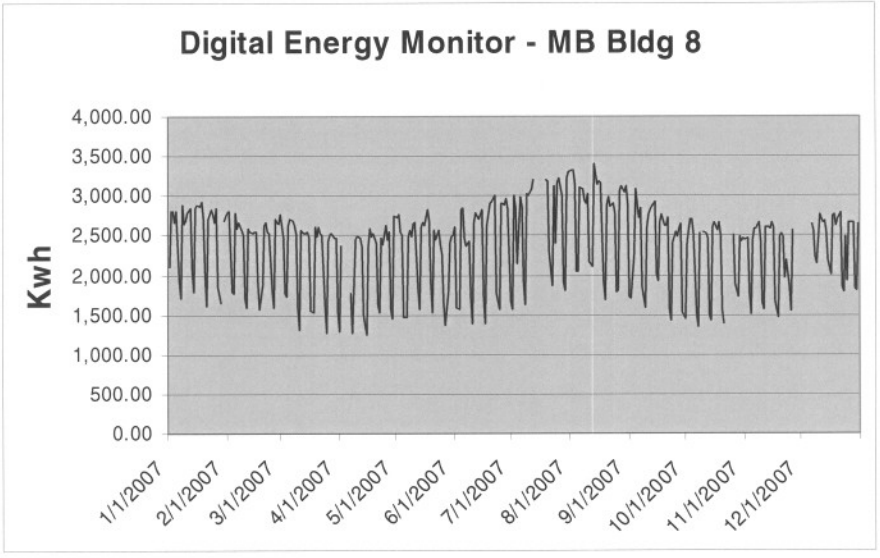
Digital Energy Monitor - MB Bldg 8
Kwh
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2/1/2007
3/1/2007
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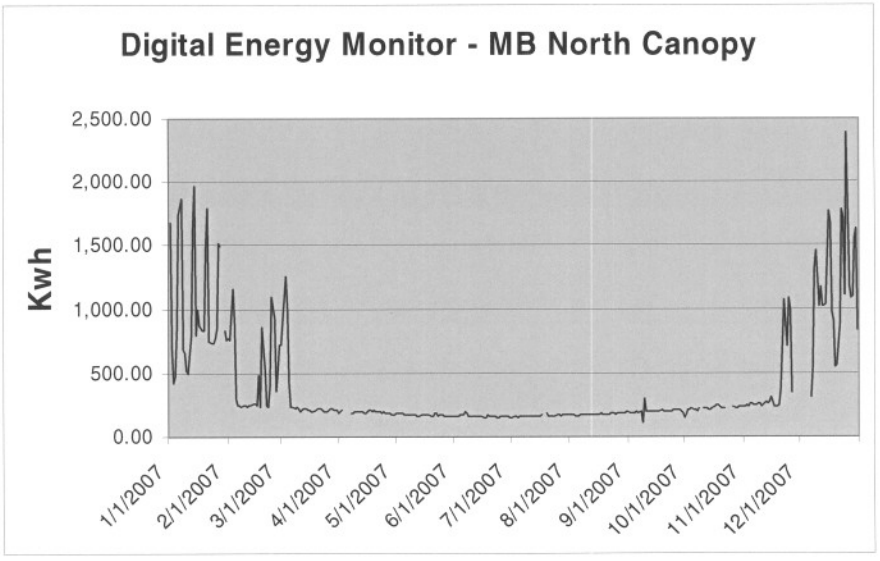
Digital Energy Monitor - MB North Canopy
Kwh
2,500.00
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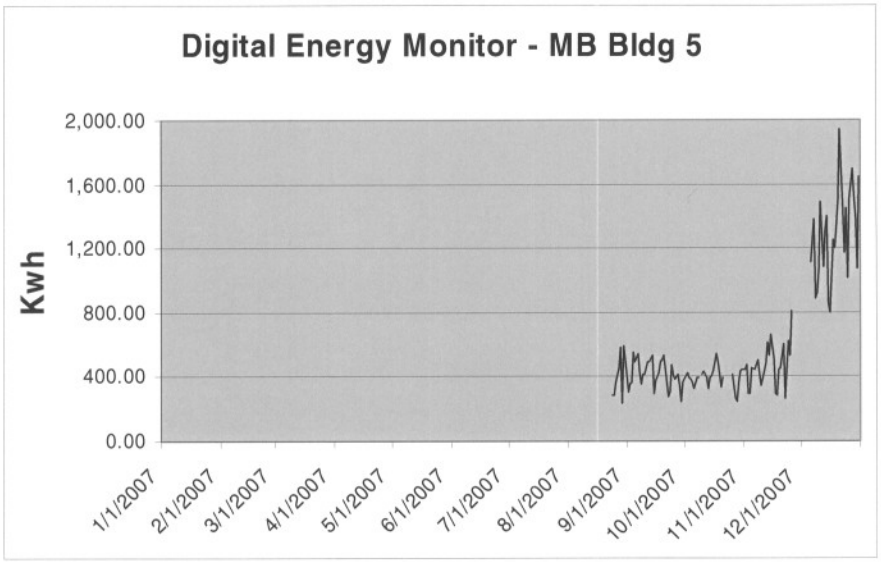
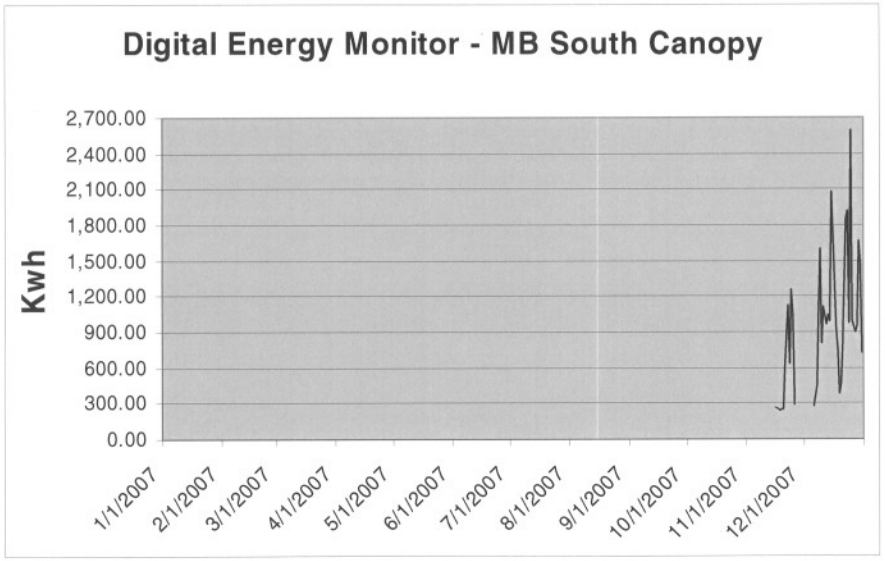




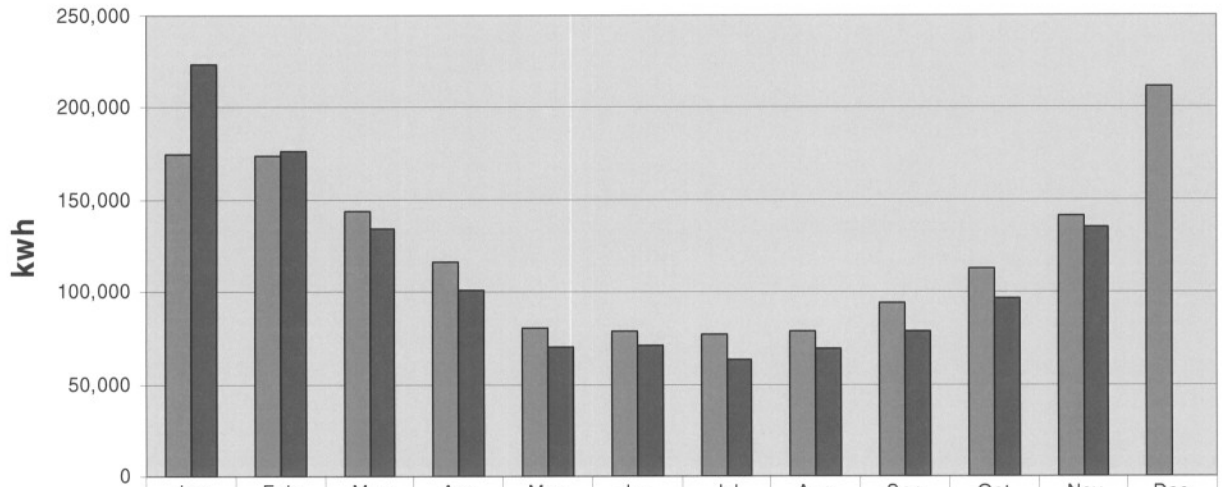
2) Install improved lighting systems;
3) Conduct energy audits at all facilities.

Measurements:

4) Reduce electrical usage along the North-South TRAX Park 'n Ride lots by 5%.

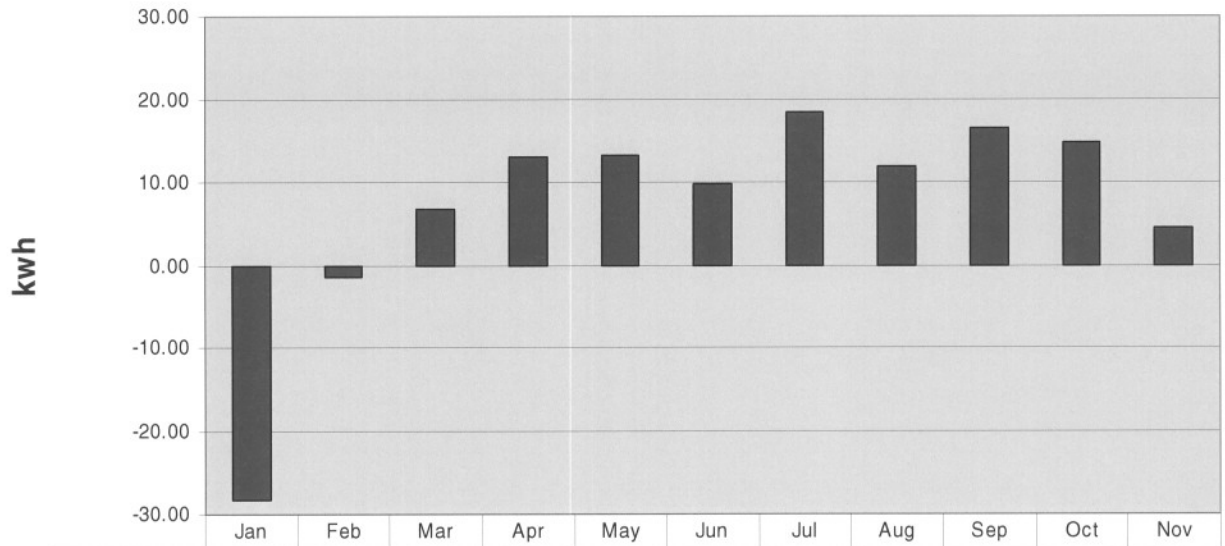
	Pre Program Energy Use (Mar-Nov, 2006)	Actual (Mar-Nov, 2007)
Kilowatt-hour	925,071	819,848

Electrical Energy Usage Along The North-South TRAX



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2006	174,439	173,738	144,160	116,188	80,818	78,749	77,381	79,015	94,139	113,209	141,412	211,107
2007	223,689	176,362	134,438	101,086	70,070	71,095	63,140	69,658	78,702	96,486	135,173	

% Reduction of Electrical Energy in 2007 North-South TRAX



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
% Reduction	-28.23	-1.51	6.74	13.00	13.30	9.72	18.40	11.84	16.40	14.77	4.41

Benefit to the environment for year:

Carbon Dioxide	Emission Rate[1]	Total Annual Pollution Emitted
2006 (Mar-Nov)	1.341 lbs/kwh	620 tons
2007 (Mar-Nov)	1.341 lbs/kwh	550 tons

1) "Carbon Dioxide Emissions from the Generation of Electric Power in the United States", United States Department of Energy and Environmental Protection Agency, July, 2000.

Benefit or savings for company:

The average cost per kilowatt-hour for 2006 and 2007 was $0.08.

Year	$/kwh	Total Cost
2006 (Mar-Nov)	$0.08/kwh	$74,005.68
2007 (Mar-Nov)	$0.08/kwh	$65,587.84

In addition to reduced energy savings, UTA has received a total of $24,059.00 from Rocky Mountain Power for the energy efficient lighting installed at our Meadowbrook facility and at our TRAX Park and Ride lots along the North-South corridor.

Targeted Goals for 2008 (include specific measurement)

Project #1: UTA Air Emission Reduction Project

Ground-level ozone is a main part of smog; and is formed by complex atmospheric chemical reactions between volatile organic compounds (VOC) and nitrogen oxides (NOx) in the presence of heat and sunlight. The following table illustrates the differing emission standards of NOx for engine exhaust from urban buses.

Federal Emission Standard for NOx	
Model Year	Grams per brake horsepower hour (g/bhp-hr)
1991	5.0
1998	4.0
2002	2.2
2007	1.2

The emission standard is engine based and is in terms of the amount of pollutant per work performed. However, emission inventory calculations use vehicle miles traveled to characterize engine operation, which is grams per mile (g/mi). Therefore, a conversion factor (CF) reported in units of bhp-hr/mi is needed. For urban buses the conversion factor is 4.68 bhp-hr/mi.

The following table illustrates the distribution of buses and the applicable federal standard of the UTA fleet.

	2006			2007		
Year	# of buses	g/bhp-hr	g/mi	# of buses	g/bhp-hr	g/mi
1992 – 1997	218	5.0	9.18	167	5.0	7.04
1998 – 2001	168	4.0	5.66	168	4.0	5.66
2002 – 2006	125	2.2	2.32	125	2.2	2.32
2007 -	0	1.2	0.00	51	1.2	0.52
Total	511		17.2	511		15.5

In 2007 UTA acquired 51 new buses as replacements for buses manufactured in 1992. This resulted in a reduction in the overall fleet NOx emission rate of 17.2 g/mi in 2006 to 15.5 g/mi in 2007. The goal set by UTA in 2008 is 14.2 g/mi for NOX emission rate through the acquisition of new buses as replacements for older buses.

The following table illustrates the actual NOx emissions, using vehicle miles traveled, for 2007.

	2007					
Year	# of buses	g/bhp-hr	Miles	Miles/bus	Grams of NOx	Grams/mile
1992 – 1997	167	5.0	5,920,736	35,454	127,461,605	22.5
1998 – 2001	168	4.0	7,406,780	44,088	127,562,528	17.2
2002 – 2006	125	2.2	5,571,697	44,574	52,776,897	9.5
2007 -	51	1.2	285,752	5,603	1,476,401	5.2
Total	511		19,184,965		309,277,430	16.1

By scheduling the more efficient buses on the longer routes in 2008, UTA has set a goal of a 10% reduction for the total tons of NOx emitted.

For this project UTA will monitor the following:

1) The number of new buses and the manufactured year of the bus replaced. The goal for 2008 is 40 new buses replacing older buses from 1997 and older.

2) The vehicle miles traveled for all buses within a manufactured year. The goal for 2008 is a 10% reduction in 16.1 g/mi of NOx emissions for the UTA fleet based on actual miles traveled.

Project #2: UTA Energy Conservation Project

UTA in 2007 identified reduction of electrical energy usage as a Clean Utah project. The following objectives have been achieved:

1) UTA has installed digital energy monitors in our buildings at our Meadowbrook facility. In addition, on November 4, 2007, UTA installed digital energy monitors at our Riverside facility.

2) UTA is in the process of installing energy efficient lighting at all divisions.

3) UTA will conduct energy audits beginning in 2008.

4) UTA has installed energy efficient lighting along the North-South TRAX Park n' Ride lots and is currently tracking the reduction of electrical energy usage.

UTA will continue the implementation of the energy conservation project in 2008 and will report on the activity status of this project per our annual Clean Utah reporting requirements.